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(71) Applicant and

(72) Inventor: OSTERWEIL, Josef [US/US]; 5411 Amberwood Lane, Rockville, MD 20853 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SHADMON, Moshe [US/US]; 4020 Wilkie Way, Palo Alto, CA 94306 (US).

(74) Agent: OSTERWEIL, Josef; 5411 Amberwood Lane, Rockville, MD 20853 (US).

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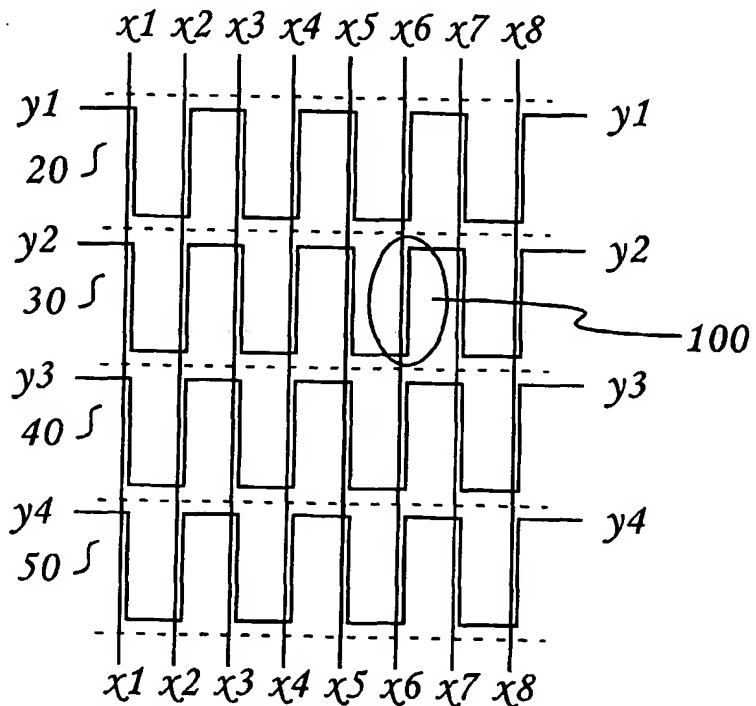
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(54) Title: METHOD AND SYSTEM FOR DATA WRITING/READING ONTO/FROM AND EMULATING A MAGNETIC STRIPE



(57) Abstract: A method of writing data on magnetic stripe of a smart card by imposing a magnetic field of a given polarity on each selected segment of the magnetic stripe, such that data on the magnetic stripe can be read by a magnetic card reader and interpreted as digital bits. The method includes providing a multi-dimensional conductor array placed proximate to the magnetic stripe, the number of conductors in the array is considerably smaller than the number of segments, and each segment is associated with two or more conductors. The method further includes providing current drivers for sending currents in a controlled direction through the conductor array. The system further includes sending currents, using said current drivers, through conductors of the array, such that for each one of the selected segment composite currents flowing through its associated two conductors overcome the coercivity of the segment on the magnetic stripe.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10951

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06K 7/08, 19/06
US CL : 235/449,492,493

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 235/449,492,493, 379-380,441,494; 360/327.33,322

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|--|
| X | US 6,206,293 B1 (GUTMAN et al) 27 March 2001 (27.05.2001), column 3, lines 49+; column 4, lines 1-7 and 25-30; column 6, lines 1-14 and 30-33. | 1,2,4-9,12,13,16-19, 22-24,28-32,42-46,49-86 |
| --- | | |
| Y | US 5,650,606 A (BAUS, Jr.) 22 July 1997, column 4, lines 65+. | 3,10-11,14,15,20-21,25-27,33-41,47-48 |
| Y | US 4,634,848 A (SHINOHARA et al) 06 January 1987, column 2, lines 2-6. | 3,14,15,27,35-41 |
| | | 10,11,20,21,25,26,33, 34,47,48 |

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See patent family annex.

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Kumiko C. Koyama

Telephone No. 571-272-2394